What is claimed is:

1. A sprayer device, comprising:

a material reservoir chamber for storing catalyst materials prior to dispensing;

a venturi feed tube, said venturi feed tube set inside said material reservoir chamber with one end of said feed tube perpendicular to the bottom of the reservoir and in contact with said catalyst materials;

an air supply connected to one side of said venturi feed tube by a first conduit;

a misting sphere connected to the other side of said venturi feed tube by a second conduit, wherein said misting sphere provides a means for atomization of the catalyst materials and a means for flow rate control during spraying; and

a exit stem tube coupled to said material reservoir chamber, wherein said exit stem tube length is tunned to provide a means for fine mist.

2. A sprayer device, comprising:

a material reservoir chamber for storing catalyst materials prior to dispensing;

a venturi feed tube positioned within said material reservoir chamber, wherein said venturi feed tube has one end in contact with said catalyst material;

an air supply attached to said material reservoir chamber via an inlet conduit;

an exit tube arrangement, wherein said exit tube provide a means of eliminating catalyst material wastage; and

a misting sphere positioned on said exit tube arrangement and connected to said venturi feed tube, wherein said misting

sphere provides a means for atomization of the catalyst materials and a means for flow rate control during spraying.

3. A method of forming a membrane electrode assembly, comprising:

obtaining a solid-electrolyte membrane;

first applying a first catalyst ink directly onto a first surface of said membrane;

second applying a second catalyst ink directly onto a second surface of said membrane;

first placing a first support substrate on said first surface of said membrane;

second placing a second support substrate on said second surface of said membrane;

bonding said first support substrate, said membrane, and said second substrate forming a membrane electrode assembly.

4. A method as in claim 3, wherein said first applying is pouring said first catalyst ink onto said membrane.

5. A method as in claim 3, wherein said second applying is pouring said second catalyst ink onto said membrane.

6. A method as in claim 4, wherein said first catalyst ink is formed from a mixture having about 7-10% catalyst, about 60-70% of NAFION(TM) solution, 15-20% of PTFE-30 that is diluted to 11% in solids, and a viscosity adjusted for pouring.

7. A method as in claim 5, wherein said second catalyst ink is formed from a mixture having about 7-10% catalyst, about 60-70% of NAFION(TM) solution, 15-20% of PTFE-30 that is

diluted to 11% in solids, and a viscosity adjusted for pouring.

8. A method as in claim 3, wherein said first support substrate is carbon paper.

9. A method as in claim 3, wherein said second support substrate is carbon paper.

10. A method as in claim 3, wherein said first applying is spraying said first catalyst ink onto said membrane.

11. A method as in claim 3, wherein said second applying is spraying said second catalyst ink onto said membrane.

12. A method as in claim 10, wherein said first catalyst ink is formed from a mixture having about 7-10% catalyst, about 60-70% of NAFION(TM) solution, 15-20% of PTFE-30 that is diluted to 11% in solids, and a viscosity adjusted for spraying.

13. A method as in claim 11, wherein said second catalyst ink is formed from a mixture having about 7-10% catalyst, about 60-70% of NAFION(TM) solution, 15-20% of PTFE-30 that is diluted to 11% in solids, and a viscosity adjusted for spraying.